

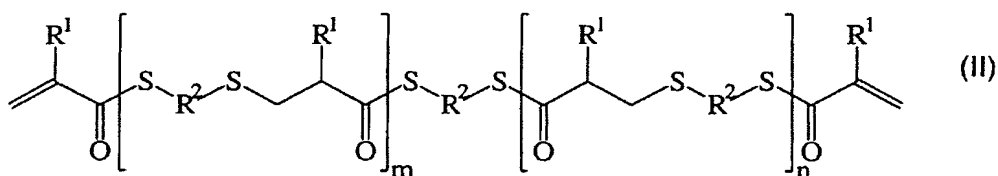
## IN THE CLAIMS

Please amend the claims as follows:

Claims 1-25 (Canceled).

Claim 26 (New): A composition comprising a mixture of:

A) compounds of the formulas (I) and (II):



wherein

R<sup>1</sup> is independently at each instance hydrogen or a methyl radical,

R<sup>2</sup> is independently at each instance a linear or branched, aliphatic or cycloaliphatic radical, or a substituted or unsubstituted aromatic or heteroaromatic radical, and

m and n are each independently an integer of not less than 0, subject to the proviso that  $m + n > 0$ ;

and

B) at least one ethylenically unsaturated monomer (A) which is different from said compounds of said formulas (I) and (II).

Claim 27 (New): The composition according to Claim 26, comprising more than 10 mol%, based on the total amount of said compounds of formulas (I) and (II), of said compounds of formula (II), wherein  $m + n = 2$ .

Claim 28 (New): The composition according to Claim 26, wherein said radical  $R^2$  is an aliphatic radical having 1 to 10 carbon atoms.

Claim 29 (New): The composition according to Claim 26, comprising more than 5.8 mol%, based on the total amount of the said compounds of said formulas (I) and (II), of said compounds of formula (II), wherein  $m + n = 3$ .

Claim 30 (New): The composition according to Claim 26, wherein comprising 0.1 to 50.0 mol%, based on the total amount of said compounds of said formulas (I) and (II), of said compounds of formula (I).

Claim 31 (New): The composition according to Claim 26, comprising more than 30 mol%, based on the total amount of said compounds of formulas (I) and (II), of said compounds of formula (II), wherein  $m + n = 1$ .

Claim 32 (New): The composition according to Claim 26, comprising said compounds of formula (II), wherein  $m + n > 3$ .

Claim 33 (New): The composition according to Claim 26, wherein a total fraction of said compounds of said formulas (I) and (II) is at least 5.0% by weight, based on the total weight of said composition.

Claim 34 (New): The composition according to Claim 26, further comprising at least one thiourethane compound (T) as monomer (A), said compound (T) obtained by:

a) the reaction of one equivalent of at least one diisocyanate of the formula (X):



wherein

$\text{R}^9$  is a linear or branched aliphatic or cycloaliphatic radical, or a substituted or unsubstituted aromatic or heteroaromatic radical, with

$v_D$  equivalents of a dithiol of the formula (XI):

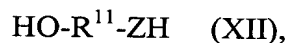


wherein

$v_D$  is from 0.1 to 0.9,

$\text{R}^{10}$  is a linear or branched, aliphatic or cycloaliphatic radical or a substituted or unsubstituted aromatic or heteroaromatic radical, or

$v_D$  equivalents of a composition comprising at least one dithiol of said formula (II) and at least one compound of said formula (V), which form the formula (XII):



wherein

$\text{R}^{11}$  is a linear or branched, aliphatic or cycloaliphatic radical or a substituted or unsubstituted aromatic or heteroaromatic radical,

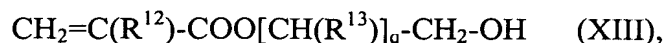
Z is oxygen or sulphur,

in the presence of a catalytically effective amount of a urethane catalyst; and

b) the reaction, in the presence of reaction-catalyzing and stabilizing compounds, of at least one  $\alpha,\omega$ -difunctional thiourethane compound of step a)

with

$v_H$  equivalents of at least one hydroalkyl (meth)acrylate of the formula (XIII):



wherein

$$v_H = 2 - 2 * v_D,$$

$\text{R}^{12}$  is hydrogen or a methyl radical,

$\text{R}^{13}$  is hydrogen or a linear or branched alkyl radical having 1 to 4 carbon atoms, and

$Q$  is a positive integer from 1 to 3.

Claim 35 (New): The composition according to Claim 34, wherein said radical urethane catalyst is at least one compound selected from the group consisting of pyridine, diazobicyclo(2.2.2)octane, collidine and picoline.

Claim 36 (New): The composition according to Claim 34, wherein said radical  $\text{R}^{13}$  is hydrogen.

Claim 37 (New): The composition according to Claim 34, wherein said at least one hydroxyalkyl (meth)acrylate of said formula (XIII) is selected from the group consisting of 2-hydroxyethyl methacrylate, 2-hydroxyethyl acrylate, 4-hydroxybutyl methacrylate and 4-hydroxybutyl acrylate.

Claim 38 (New): The composition according to Claim 34, wherein said radical  $\text{R}^9$  is an aliphatic radical having 2 to 9 carbon atoms.

Claim 39 (New): The composition according to Claim 34, wherein said radical R<sup>10</sup> is an aliphatic radical having 1 to 10 carbon atoms.

Claim 40 (New): The composition according to Claim 39, wherein said radical R<sup>10</sup> is a linear aliphatic radical having 2 to 8 carbon atoms.

Claim 41 (New): The composition according to Claim 34, further comprising at least one ethylenically unsaturated monomer (B), which is different from the thiourethane compound (T), as a monomer (A).

Claim 42 (New): The composition according to Claim 41, wherein said at least one ethylenically unsaturated monomer (B) is a (meth)acrylate of the formula (XIV):

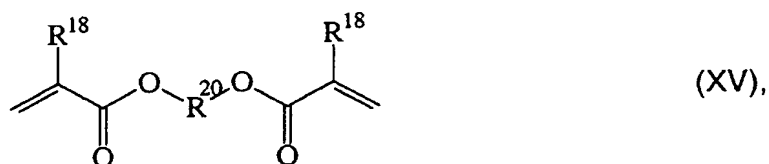


wherein

R<sup>18</sup> is hydrogen or methyl, and

R<sup>19</sup> is a linear or branched alkyl or cycloalkyl radical or an aromatic radical having 1 to 40 carbon atoms;

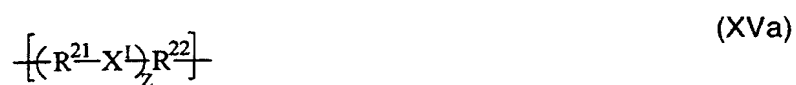
a di(meth)acrylate of the formula (XV):



wherein

$\text{R}^{18}$  is independently at each instance hydrogen or methyl, and

$\text{R}^{20}$  is a linear or branched, aliphatic or cycloaliphatic radical or a radical of the formula (XVa):



wherein

$\text{R}^{22}$  is a linear or branched, aliphatic or cycloaliphatic radical,

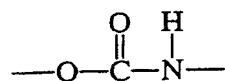
$z$  is an integer between 1 and 1000,

$\text{R}^{21}$  is independently at each instance a linear or branched, aliphatic or cycloaliphatic radical, and

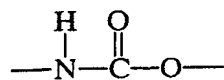
$\text{X}^1$  is independently at each instance hydrogen or sulphur, an ester group of the formula (XVb) or (XVc):



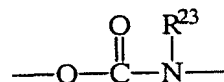
a urethane group of the formula (XVd), (XVe), (XVf) or (XVg):



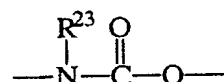
(XVd)



(XVe)

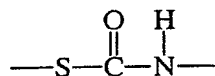


(XVf)

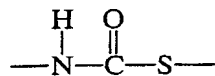


(XVg)

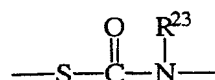
a thiourethane group of the formula (XVh), (XVi), (XVj) or (XVk):



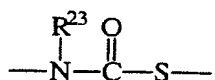
(XVh)



(XVi)

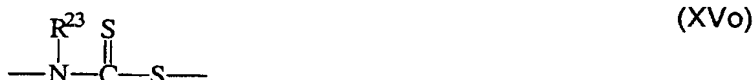


(XVj)



(XVk)

a dithiourethane group of the formula (XVl), (XVm), (XVn) or (XVo):



or a thiocarbamate group of the formula (XVp), (XVq), (XVr) or (XVs):



wherein  $R^{23}$  is a linear or branched, aliphatic or cycloaliphatic radical,  
and/or styrene.

Claim 43 (New): The composition according to Claim 42, wherein said monomer  
(B) is a di(meth)acrylate of said formula (XV).



Claim 44 (New): A process for producing a transparent plastic, comprising polymerizing the composition according to Claim 26.

Claim 45 (New): A highly transparent plastic obtained by the process according to Claim 44.

Claim 46 (New): A highly transparent plastic according to Claim 45, wherein said transparent plastic has a DIN 53491 refractive index is greater than 1.6.

Claim 47 (New): A highly transparent plastic according to Claim 45, wherein said transparent plastic has a DIN 53491 Abbe number greater than 36.

Claim 48 (New): A highly transparent plastic according to Claim 45, wherein said transparent plastic has an ISO 179/1 fU Charpy impact toughness greater than 3.0 kJ/m<sup>2</sup>.

Claim 49 (New): A highly transparent plastic according to Claim 45, wherein said transparent plastic has a DIN 5036 transmission greater than 88.5%.

Claim 50 (New): A highly transparent plastic according to Claim 45, wherein said transparent plastic has an ISO 306 Vicat temperature greater than 50.0°C.

Claim 51 (New): An optical lens comprising the transparent plastic according to Claim 45.

Claim 52 (New): An optical lens according to Claim 51, wherein said optical lens is an ophthalmic lens.